

CLAIMS

What is claimed is:

1 1. A method, comprising:
2 coupling a handheld device to a server, the server having a first database
3 and the handheld device having a second database, the handheld device having an
4 application that allows a user to access the second database;
5 determining whether the application needs to be updated;
6 causing the server to provide to the handheld device an application update if
7 the application needs to be updated;
8 causing the handheld device to record transactions performed on the second
9 database by a user;
10 causing the handheld device to provide to the server transaction information,
11 wherein the transaction information is related to the recorded transactions;
12 causing the server to perform a transaction on the first database based on
13 the transaction information;
14 causing the server to extract data from the first database to be used to
15 update the second database; and
16 causing the server to provide to the handheld device at least a portion of the
17 extracted data.

1 2. The method of claim 1, wherein the server provides metadata to the
2 handheld device in providing the application update.

1 3. The method of claim 1, wherein coupling the handheld device to the server
2 comprises coupling the handheld device to a companion device that can be coupled
3 to the server.

1 4. The method of claim 1, wherein a synchronization engine is configured to
2 cause the server to provide to the handheld device at least one of the application
3 update or the extracted data.

1 5. The method of claim 4, wherein the synchronization engine resides in the
2 server.

1 6. The method of claim 4, wherein the synchronization engine resides in a
2 companion device that is coupled to the server and the handheld device.

1 7. The method of claim 4, wherein synchronization engine resides in the
2 handheld device.

1 8. The method of claim 1, wherein a synchronization manager is configured to
2 cause the handheld device to provide to the server the transaction information.

1 9. The method of claim 8, wherein the synchronization manager resides in the
2 handheld device.

1 10. The method of claim 8, wherein the synchronization manager resides in a
2 companion device that is coupled to the server and the handheld device.

1 11. A system, comprising:

2 means for coupling a handheld device to a server, the server having a first
3 database and the handheld device having a second database, the handheld device
4 having an application to allow a user to access the second database;

5 means for determining whether the application needs to be updated;

6 means for causing the server to provide to the handheld device an application
7 update if the application needs to be updated;

8 means for causing the handheld device to record transactions performed on
9 the second database by a user;

10 means for causing the handheld device to provide to the server transaction
11 information, the transaction information describing at least in part the recorded
12 transactions;

13 means for causing the server to perform a transaction on the first database
14 as described in the transaction information;

15 means for causing the server to extract data from the first database to be
16 used to update the second database; and

17 means for causing the server to provide to the handheld device at least a
18 portion of the extracted data.

1 12. The system of claim 11, wherein the application update comprises metadata.

1 13. The system of claim 11, wherein the means for coupling the handheld device
2 to the server comprises a companion device connected to the server and the
3 handheld device.

1 14. The system of claim 11 further comprising a synchronization engine that
2 includes the means for causing the server to provide to the handheld device the
3 application update and the means for causing the server to provide to the handheld
4 device the extracted data.

1 15. The system of claim 14, wherein the synchronization engine resides in the
2 server.

1 16. The system of claim 14, wherein the synchronization engine resides in a
2 companion device that is coupled to the server and the handheld device.

1 17. The system of claim 14, wherein synchronization engine resides in the
2 handheld device.

1 18. The system of claim 14, wherein the synchronization engine also includes the
2 means for causing the server to extract data.

1 19. The system of claim 14, wherein the synchronization engine also includes the
2 means for causing the server to perform a transaction.

1 20. The system of claim 11, further comprising a synchronization manager that
2 includes the means for causing the handheld device to provide to the server the
3 transaction information.

1 21. The system of claim 20, wherein the synchronization manager resides in the
2 handheld device.

1 22. The system of claim 20, wherein the synchronization manager resides in a
2 companion device that is coupled to the server and the handheld device.

1 23. The system of claim 20, wherein the synchronization manager also includes
2 the means for causing the handheld device to record transactions.

1 24. The system of claim 20, wherein synchronization manager also includes the
2 means for causing the handheld device to record transactions.

1 25. A system comprising:
2 a server having a first database and a synchronization engine, wherein the
3 synchronization engine includes:
4 a metadata unit to provide update information for an application,
5 a transaction processor to perform a transaction on the first database ,
6 and
7 a data extractor to extract data from the first database; and
8 a handheld device coupled to the server, the handheld device having a
9 second database and a synchronization client, the application to provide a user
10 interface to the second database, wherein the synchronization client includes:
11 a metadata importer to receive the update information,
12 a transaction recorder to record transaction information of transactions
13 performed on the second database by a user, and
14 a data importer to update data stored in the second database based
15 on data extracted from the first database.

1 26. The system of claim 25, wherein the handheld device is coupled to the server
2 through a companion device.

1 27. The system of claim 25, wherein the handheld device further comprises a
2 transaction database to store transaction information.

1 28. A system comprising:

2 a server having a main database and a synchronization engine, wherein the
3 synchronization engine includes:

4 a metadata unit to provide update information for an application,

5 a transaction processor to perform a transaction on the main
6 database, and

7 a data extractor to extract data from the main database; and

8 a companion device couplable to the server, the companion device having a
9 second database and a synchronization client, wherein the synchronization client
10 includes:

11 a metadata importer to receive the update information, and

12 a data importer to update data stored in the second database based
13 on data extracted from the first database; and

14 a handheld device couplable to the companion device, the application
15 residing in the handheld device to provide a user interface to the local database,
16 wherein the handheld device further includes:

17 a local database, and

18 a transaction recorder to record transaction information of transactions
19 performed on the local database by a user via the application.

1 29. The system of claim 28, wherein the handheld device further comprises a
2 transaction database to store transaction information.

1 30. The system of claim 28, wherein the handheld device further comprises a
2 data storer to store extracted data in the local database.

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